

Coding sequence of the *cbh 1* gene (SEQ ID NO: 4). Lower case letters represent the signal sequence, upper case letters the catalytic domain, bolded italics the linker region, and upper case underlined the cellulose-binding domain.

atgtatcggaaagtggccgtcatctggcccttggccacagctgtgct**CAGTCGGCCTGC**ACTCTCCAAT
CGGA
GACTCACCCGCCTCTGACATGGCAGAAATGCTCGTCTGGTGGCACGTGC**ACT**
CAACA
GACAGGGCTCCGTGGTCATCGACGCCAACTGGCGCTGGACTCACGCTACGAAC
AGCAGCACGAAC**T**GCTACGATGGCAACACTGGAGCTCGACCCTATGTCC**TG**
ACAACGAGAC**C**TGCGCGAAGAACTGCTGTCTGGACGGTGCCGC**T**ACGCGTC
CACGTACGGAGTTACCACGAGCGGTAAACAGCCTCTCCATTGGCTTGTCA**CC**
AGTCTGCGCAGAAGAACGTTGGCGCTCGC**CTT**ACCTTATGGCAGACGACAC
GACCTACCAGGAATTCAC**C**CTGCTTGGCAACGAGTTCTCTTCGATGTTGATG
TTTCGAGCTGCCGTGGC**T**GTGAGCAAGTATCCCACCAACACCGCTGGCG**CCA**AGTACG
GCGGATGGTGGCG**T**GTGAGCAAGTATCCCACCAACACCGCTGGCG**CCA**AGTACG
GCACGGGGTACTGTGACAGCCAGTGTCCCCCG**G**ATCTGAAGTTCATCAATGG
CCAGGCCAAC**G**TGAGGGCTGGAGCC**G**TCATCCAACACCG**G**AAACACGGG
CATTGGAGGACACGGAAAGCTGCTGCTGAGATGGATATCTGGAGG**CAAC**
TCCATCTCCGAGGCT**T**TA**CCCC**AC**CC**CTGCACGACTGTGGCCAGGAGAT
CTGCGAGGGT**G**ATGGGTGC**GGCG**AA**CT**ACTCCGATAACAGATATGGCG**GC**
ACTTGC**G**AT**CC**CG**AT**GG**G**CT**GC**ACT**GG**A**ACCC**AT**AC**CG**CT**GG**GC**AA**AC**AC**CC**
G**CTT**CT**AC**GG**CC**CT**GG**CT**CA**AG**CTT**AC**CC**CT**CG**AT**AC**CC**AC**AA**AG**AA**AT**GG**AC**
G**TT**GT**C**AC**CC**AG**TT**CGAGAC**G**T**CG**GG**GT**GC**CC**AT**CA**AC**CG**AT**AC**AT**GT**CC**AG**
AT**GG**CG**TC**ACT**TT**CC**AG**C**AG**CC**CA**AC**GC**CG**AG**CT**GG**AT**GT**AG**TT**ACT**CT**GG**CA**
CGAG**CT**CA**AC**GA**AT**GT**AT**TA**CT**GC**AC**AG**CT**GT**GG**AG**GG**C**AG**AA**TC**GG**CG****G**AT**CC**
T**CTT**CT**CA**AG**AC**AA**GG**CG**GG**CT**GA**CT**CA**AG**TT**CA**AG**AA**AG**GT**AC**CT**CT**GG**CG**
GC**AT**GG**TT**CT**GG**CT**AT**GA**GT**CT**GT**GG**AT**GA**TT**ACT**AC**GC**CA**AC**AT**GT**GT**GG
CT**GG**ACT**CC**AC**CC**TA**CC**CG**AC**AA**AC**GA**AG**AC**CT**CC**CT**CC**AC**AC**CC**GG**GT**GC**GT**GC
GC**GG**AA**AG**CT**GT**CC**AC**AG**CT**CC**GG**GT**GT**CC**CT**GC**TC**AG**GT**CG**GA**AT**CT**CA**GT**CT
CC**CA**AC**GC**CA**AG**GT**TC**AC**CT**CC**TA**AC**AT**CA**AG**TT**CG**GA**CC**AT**TG**GC**AG**CA
CC**GG**CA**AC**CC**CT**AG**CG**GG**CG**CA**AC**CC**CT**CC**GG**CG**GA**AA**AC**CC**GG**CT**GG**CA**CC**
AC**CC****AC****CC****GG****CC****CC****AG****CC****AC****CT****AC****CC****AT****GG****GA****AG****CT****CT****CC****GG****AC****CT****AC****CC****AG**
CT**CA****CT****AC****GG****CC****AG****T****G****CG****GG****GT****AT****T****GG****CT****AC****AG****CG****GG****CC****CC****AC****GG****T****CT****GC****GC**
CAG**CG****GG****CA****CA****AC****TT****GC****CC****AG****GT****TC****CT****GA****AC****CC****CT****TA****CT****AC****TC****AG****GT****GC****CT****GT****AA**
A**G****CT****CC**

Figure 1

SDS-PAGE western blot using anti-CBH I showing the reduction in molecular weight of rCBH I expression clones as a function of the introduction of N>A modifications.

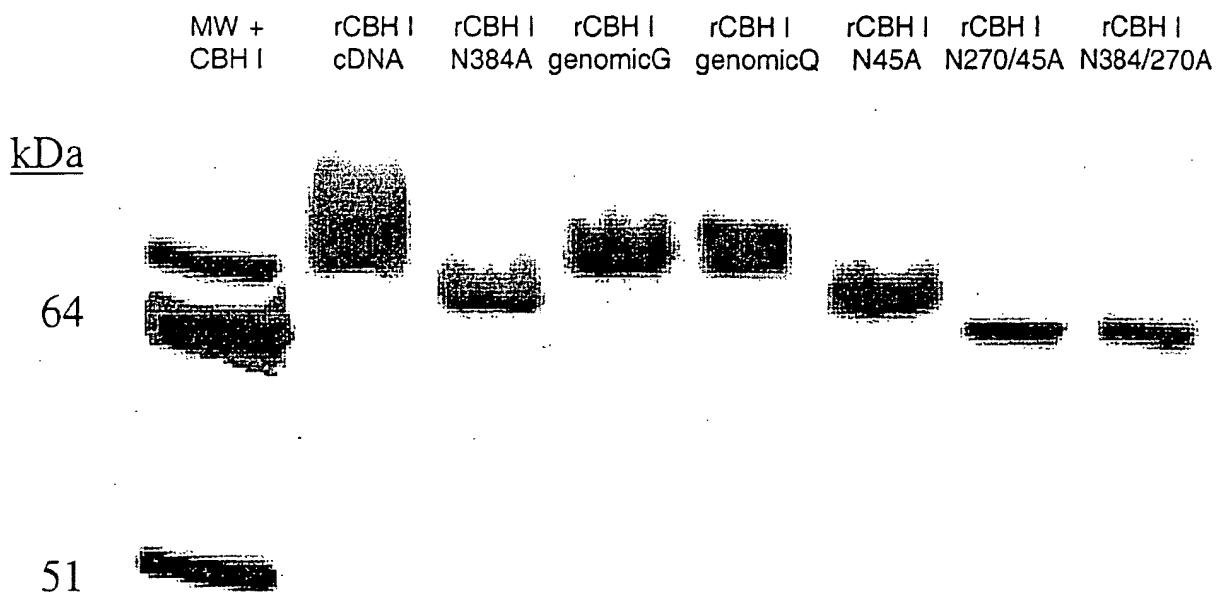


Figure 2

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Plasmid map of fungal expression vector pPFE2/CBHI

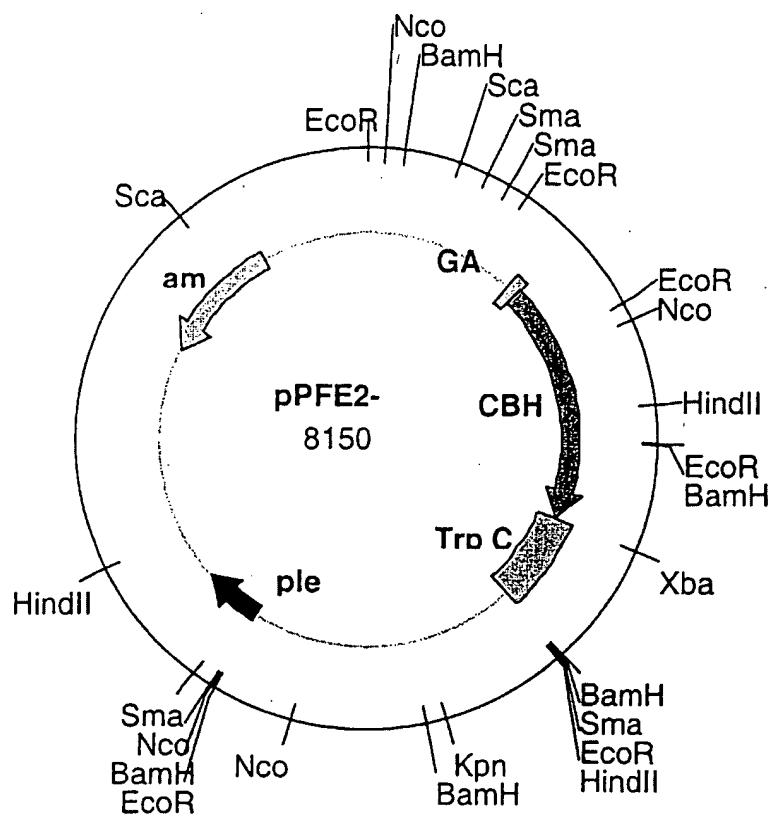


Figure 3

Nucleotide sequence SEQ ID NO: 1, 5'-
CCTCCCGGCGGAAACCGCCTGGCACCACCACCCGCCGCCA-3', coding
for the linker region, PP₁GNPPGTTT₂RRP (SEQ ID NO: 2), of the CBH I protein,
showing additional proline residues that effect conformation of the linker region in the
protein structure.

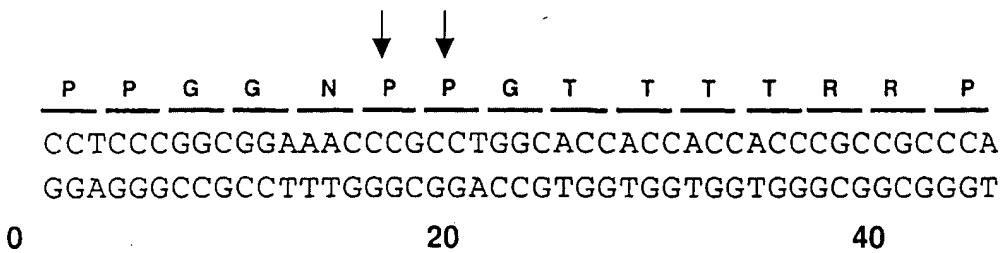


Figure 4